

U. S. Department of Energy National Laboratory Network Notice of Opportunity:

Small Business Vouchers (SBV) Request for Assistance (RFA)

A. Overview

The U.S. Department of Energy's (DOE) enterprise of National Laboratories is an innovation powerhouse full of unique and advanced instruments, and world class scientists, engineers and other professionals. The Small Business Vouchers (SBV) Pilot is a mechanism structured to allow small businesses engaged in the renewable energy and the energy efficiency sectors greater access to the vast capabilities and resources that exist at the DOE National Laboratories.

Through the SBV Pilot, eligible small businesses can tap into the reserve of National Laboratory intellectual and technical assets to overcome critical technology and commercialization challenges such as:

- Prototyping
- Materials characterization
- High performance computations
- Modeling and simulations
- Intermediate scaling to generate samples for potential customers
- Validation of technology performance
- Designing new ways to satisfy regulatory compliance.

B. Eligibility Requirements & Certifications

Eligible Requester - An eligible requester is a small business that is (1) organized for-profit; (2) has less than 500 employees; and (3) is majority owned by U.S. citizens, U.S. owned small businesses, or U.S. based venture capital (VC), hedge fund (HF) or private equity (PE) companies.

Company Certifications - Requestors must certify that they will accept the SBV Agreements without modification, that they will provide the required 20% cost share upon selection for a voucher, and that they agree to report data through 2020 to an independent evaluator of the SBV Pilot. Details on SBV Agreements can be found in Section C of this document. Further details on data reporting and cost share requirements can be found in Sections F and G respectively.

Eligible Types of Assistance - Eligible types of assistance from National Laboratories are limited to providing the unique capabilities and facilities of the DOE National Laboratory network. Vouchers cannot be used at National Laboratories to obtain services or use of equipment that is available in the private sector.

Eligible Technical Areas for Small Business Vouchers Requests for Assistance include:

- Advanced Manufacturing
- Bioenergy Technologies
- Building Technologies
- Fuel Cell Technologies
- Geothermal Technologies
- Solar Energy Technologies

- Vehicle Technologies
- Water Power Technologies
- Wind Energy Technologies

C. Voucher Details

Funding - Vouchers support small businesses by providing funding to DOE National Laboratory staff to help small businesses overcome critical technology and commercialization challenges. Vouchers are not financial awards made to small businesses. Vouchers will be issued in up to three rounds between September 2015 and the summer of 2016. Funding is not guaranteed to be carried into the second and third rounds if all vouchers can be fulfilled in round one.

Table 1: Voucher Funding* and Anticipated Number of Vouchers by Technology Area

Technology Area / Sub-area	Total Available SBV Funding	Anticipated No. of Vouchers
Advanced Manufacturing	\$4,394,389	14 - 50
▪ Next Generation Materials		
Technology Area / Sub-area	Total Available SBV Funding	Anticipated No. of Vouchers
Bioenergy	\$2,124,761	6-40
▪ Conversion Technologies		
▪ Demonstration and Market Transformation		
▪ Analysis and Sustainability		
▪ Algae		
▪ Feedstock Logistics		
Technology Area / Sub-area	Total Available SBV Funding	Anticipated No. of Vouchers
Buildings Technologies	\$1,931,600	6-35
▪ Energy Consumption Reduction		
▪ Demand Side Management and Interoperability		
Technology Area / Sub-area	Total Available SBV Funding	Anticipated No. of Vouchers
Fuel Cells Technologies	\$2,897,400	9-50
▪ Fuel Cells		
▪ Production and Delivery		
▪ Storage		
▪ Safety codes and Standards		
Technology Area / Sub-area	Total Available SBV Funding	Anticipated No. of Vouchers
Geothermal Technologies	\$1,449,000	4-25
▪ Enhanced Geothermal System		
▪ Low Temperature Geothermal		

▪ Systems Analysis		
Technology Area / Sub-area	Total Available SBV Funding	Anticipated No. of Vouchers
Solar Energy Technologies	\$978,750	3-15
▪ Balance of Systems (BOS)		
▪ Concentrating Solar Power (CSP)		
▪ Systems Integration (SI)		
▪ Photovoltaic (PV)		
Technology Area / Sub-area	Total Available SBV Funding	Anticipated No. of Vouchers
Vehicle Technologies	Total \$2,366,210	8-45
▪ Advanced Combustion Engines	\$ 511,871	1-10
▪ Battery R&D	\$ 864,402	2-15
▪ Electric Drive R&D	\$ 219,231	1-5
▪ Vehicle Systems	\$ 190,276	1-4
▪ Materials (Lightweight)	\$ 298,445	1-6
▪ Materials (Propulsion)	\$ 73,385	1
▪ Fuels and Lubricants	\$ 208,600	1-4
Technology Area / Sub-area	Total Available SBV Funding	Anticipated No. of Vouchers
Water Power Technologies	\$2,221,340	7-40
▪ Marine & Hydrokinetic		
▪ Hydro		
Technology Area / Sub-area	Total Available SBV Funding	Anticipated No. of Vouchers
Wind Technologies	\$965,800	3-15
▪ Distributed Wind		
▪ Utility Scale Wind		

**Note that the dollar amounts shown include funding for lab staff to administer the SBV Pilot. Funding is not guaranteed to carry over into subsequent SBV rounds.*

Voucher Period of Performance: Vouchers are valid for up to 12 months from the date the agreement is executed. Exceptions may be granted if lab staff is not available to begin right away.

Voucher Terms & Conditions: All voucher recipients will sign one of two standard, non-negotiable agreements. Small businesses may engage with National Laboratories on collaborative research and development (R&D) that may result in the development of intellectual property (IP). In that case, a collaborative research and development agreement (CRADA) https://www.sbv.org/community-library/accounts/92/925112/ShortFormCRADA_SBPilot_Template.pdf may be the most appropriate contractual vehicle. Alternatively, Small Business Vouchers may be awarded to requesters who do not anticipate the development of intellectual property, and in those cases the Technical Assistance Pilot Agreement (TAPA) https://www.sbv.org/community-library/accounts/92/925112/TechnicalAssistancePilotAgreement_SBPilot_Template.pdf may be the more appropriate agreement. Products embodying intellectual property developed under SBV assistance must

be substantially manufactured in the United States. Please refer to the specific agreements above for further details.

The U.S. DOE and its enterprise of National Laboratories are committed to accelerating the speed at which we are able to review, select and start Voucher work. As such, we cannot allow for negotiation of the terms and conditions in the linked agreements.

D. Key Dates & Timeline

Between September 2015 and June 2016, up to three rounds will be issued under the Small Business Vouchers Pilot. All rounds will follow a similar timeline and be available for use for up to 12 months after executing an agreement with a national laboratory.

Round 1

- September 23, 2015 - Round 1 Request for Assistance (RFA) Opens
- October 23, 2015 - Round 1 RFA closes
- Mid - December, 2015 - Notification of Selections
- Mid-December to Mid-January - Finalization of statement of work, budget and cost share
- February 2016 - Voucher work can begin

Subsequent rounds will follow a similar timeline and are expected to open one month upon starting work in the previous round (Estimated in February and June 2016).

E. Merit Review Criteria

Requests for assistance will be evaluated in accordance with the following criteria:

1. Technical Merit & Lab Alignment (50%) 50 possible points

- Extent to which the requestor has clearly identified the problem or challenges the company is facing. (10 points)
- Extent to which the innovation/concept/technology will contribute in a significant manner in one of more of the following areas: (20 points)
 - Cost savings
 - Increased performance
 - New processes or materials
 - New products or markets
 - Reduced greenhouse gas emissions
 - More efficient energy generation
 - Reduced life-cycle or process energy use
 - Increased regulatory acceptance

- Extent to which the request is aligned with lab capabilities and priorities. (20 points)

2. Business & Market Impact (40%) 40 possible points

- Quality of the requestor's plan to utilize the results or outputs from the assistance in a manner that will lead to advancement of their business, industry or marketplace. (15 points)
- Extent to which the innovation/concept/technology included in the request will contribute to the overall clean energy marketplace or state of technology development. (15 points)
- Extent to which the requestor has a feasible plan for deploying the innovation/concept/technology to the market. (10 points)

3. Qualifications & Experience (10%) 10 possible points

- Extent to which the team is capable of executing a successful project and subsequent implementation or deployment. (10 points)

F. Reporting Requirements

The U.S. Department of Energy has contracted with a third-party evaluator for the purposes of assessing the effectiveness of the Small Business Vouchers Pilot. The third-party evaluator will request information from small business voucher recipients annually through 2020 (5 years). Voucher recipients are expected to complete a web survey necessitating no more than 30 minutes of the respondent's time each year. The survey questions will seek information from respondents such as: satisfaction with pilot participation processes and pilot services received; interest in subsequent lab assistance; technology development status; commercialization advancements; intellectual property created; follow-on funding attained; and product sales, if any. Time and cost incurred to comply with these reporting requirements can be included in a requestor's cost share contribution.

G. Cost Share

Every cost share contribution must be allowable under the applicable Federal cost principles. In addition, cost share must be verifiable upon submission of the Full Application.

Requesters may provide cost share in the form of cash or in-kind contributions. Allowable in-kind contributions include, but are not limited to: personnel costs, indirect costs, facilities and administrative costs, rental value of buildings or equipment, and the value of a service, other resource, or third party in-kind contribution. Requesters are allowed to estimate the cost to provide metrics data about the SBV for 5 years to the U.S. Department of Energy.

Project teams may use funding or property received from state or local governments to meet the cost share requirement, so long as the funding was not provided to the state or local government by the Federal Government.

The Prime Recipient may not use the following sources to meet its cost share obligations including, but not limited to: revenues or royalties from the prospective operation of an activity beyond the project

period; proceeds from the prospective sale of an asset of an activity; federal funding or property (e.g., Federal grants, equipment owned by the Federal Government); or expenditures that were reimbursed under a separate Federal Technology Office. For example, Small Business Innovation Research (SBIR) /Small Business Technology Transfer (STTR) funding cannot be used to provide in-kind or direct cost share. Small businesses with SBIR/STTR funding can make a request for assistance under the Small Business Vouchers Pilot, but the scope of work must be distinct from existing SBIR/STTR projects.

Requestors may not use the same cash or in-kind contributions to meet cost share requirements for more than one project or program. For more information on allowable cost share, please refer to the Federal Acquisition Regulations (FAR) Part 31 at <http://farsite.hill.af.mil/reghtml/regs/far2afmcfars/fardfars/far/31.htm>).

In addition, independent research and development (IR&D) funds are allowable as an indirect cost expense to the extent that the costs are allocable and reasonable. Please refer to FAR 31.205-18 for guidance on IR&D cost share.

H. Submitting a Request for Assistance (RFA)

To request assistance from a national laboratory, follow these steps:

Step 1: Confirm your eligibility on the sbv.org website.

Step 2: Review this document (Notice of Opportunity: SBV Request for Assistance) carefully

Step 3: Visit sbv.org and click on the "Submit Your Request" button to create a login/ account

Step 4: Prepare your request (instructions are located in Section I of this Notice of Opportunity; an optional template is available [le](#) on the sbv.org submission page.

Step 5: Register your company with the online form located on the sbv.org submission page and upload your request (this must be done in one sitting).

Step 6: Hit the submit button at the bottom of the submission page (you will receive an auto-generated confirmation of receipt via email.)

NOTE: Step 5 and Step 6 must be completed in one sitting. The platform will not save partial registration or submission information.

Please do not provide any proprietary information in the request or in supporting documentation or resumes.

I. Request for Assistance (RFA): (template provided on the SBV submission page)

Department of Energy National Laboratory Small Business Voucher Pilot

Request for Assistance (RFA) Template

Requests for assistance are limited to 5 pages of text. Graphs, tables, and images may be included as supporting documentation, limited to 2 pages in an appendix. In addition, respondents may include up to 3 resumes for key personnel. Please use 11.5 Times New Roman font and 1" margins. Tables and graphics may have smaller font, as long as the information is legible. Please save all pages as one PDF file and save it as "Your Company Name_SBVpilot" (i.e., Company XYZ_SBVpilot.PDF). Once all files have been saved, please upload to the sbv.org website.

Section I: Technical Merit & Lab Alignment

1. Company Summary: Describe the mission and vision for your company. What differentiates your company from others in this market?
2. Problem Statement: Describe the challenge your company is facing and how this assistance, if granted, will help you overcome that challenge.
3. National Laboratory Alignment: As specifically as possible, describe the National Laboratory capability you plan to utilize.
4. Environmental & Energy Impact: Describe how this project, if successful, will contribute to one of more of the following areas:
 - a. Cost savings
 - b. Increased performance
 - c. New processes or materials
 - d. New products or markets
 - e. Reduced greenhouse gas emissions
 - f. More efficient energy generation
 - g. Reduced life-cycle or process energy use
 - h. Increased regulatory acceptance
5. Work Scope: Describe the work that you would like completed using the National Laboratory capability.
6. Expected Outcomes from Technical Assistance: Describe the impact the requested assistance will have on your business.

Section II: Business & Market Impact

7. Use of Project Results: Describe how the results of the proposed assistance will be used to advance the development of your company's products or services.
8. Market Analysis: Describe the expected impact on the broader market if the project is successful.
9. Deployment Approach: When and how will these new or improved products or services be introduced to the market or otherwise benefit your company?

Section III. Qualifications & Experience

10. Team: List the key members of your company's leadership and technical team. Briefly describe their qualifications and experience. (Respondents may include up to 3 resumes in addition to this 6-page request and supporting documentation).

Section IV. Cost Share

11. Cost Share. Describe how your company will provide a minimum of 20% cost share for this project. Company cost share must be at least 20% of the total project cost (*i.e. company cost / (company cost + federal cost) > 20%*). If selected, cost share will be confirmed during the negotiation stage, when the budget for the Voucher is developed with a National Laboratory. Please describe the types of cost share your company can provide with a range of cost share values by item. **Note: Federally-funded awards may not be used to provide cost share. For more information on allowable cost share and overall budget estimates, please refer to document titled “SBV Notice of Opportunity for Technical Assistance from DOE National Laboratories” on the sbv.org website.**

Section V: National Laboratory Preference

12. National Laboratory Preference. If applicable, select the National Laboratory with which you would like to collaborate on the proposed request for assistance.
- a. National Laboratory Contact(s). If applicable, indicate your contact within your preferred National Laboratory along with their email address and phone number.

J. Confirmation of Receipt of Request & Status Updates

Once the request has been submitted, requesters will receive an auto-notification of receipt of the request. Your request will be reviewed for compliance and then routed to a merit review committee if compliant. You will receive an email stating the status of your request post-review. Requesters may check on the status of the evaluation at any time by logging into the sbv.org website. National laboratory staff will not be able to provide status on requests. Requesters will be notified of a final decision whether the request was accepted or not via email.

To upload your Request for Assistance, please visit

<https://www.sbv.org/a/showCreateTopic.do?templateId=0>